

# El Salvador - Logistical Infrastructure

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## Overview

### Identification

**COUNTRY**

El Salvador

**EVALUATION TITLE**

Logistical Infrastructure

**EVALUATION TYPE**

Independent Evaluation

**ID NUMBER**

DDI-MCC-SL2-LIP-IE-CH2M-2020-v1

### Overview

**UNITS OF ANALYSIS**

Individuals, Firms

**KIND OF DATA**

Sample survey data [ssd]

### Coverage

**GEOGRAPHIC COVERAGE**

Coastal Region

**UNIVERSE**

Road Users

### Producers and Sponsors

**PRIMARY INVESTIGATOR(S)**

Name	Affiliation
CH2M Hill, Inc.	

**FUNDING**

Name	Abbreviation	Role
Millennium Challenge Corporation	MCC	Donor

### Metadata Production

**METADATA PRODUCED BY**

Name	Abbreviation	Affiliation	Role
CH2M Hill	CH2M		Independent Evaluator

**DATE OF METADATA PRODUCTION**

2019-10-31

**DDI DOCUMENT ID**

DDI-MCC-SL2-LIP-IE-CH2M-2020-v1

## MCC Compact and Program

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### **COMPACT OR THRESHOLD**

El Salvador Compact II

### **PROGRAM**

Economic Analysis and Independent Evaluation Services Research Area 0: Project Implementation Research Area 1: Engineering Analysis and Economic Modelling Research Area 2: Road Maintenance Research Area 3: Road Usage and Current Users Research Area 4: Transportation Market Structure Research Area 5: Border Crossing Activities at El Amatillo Research Area 6: Border Crossing Activities at Anguiatú

### **MCC SECTOR**

Transport (Trans)

# Sampling

## Study Population

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Road Users

## Sampling Procedure

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RA0: Interviews will be conducted with at least one key informant per organization but likely up to four.

RA2: Visual Condition Surveys and IRI Measurement will be conducted on all road segments. Interviews will be conducted either with individuals or with small groups of two to three individuals. Anticipated total sample size is 32-52 respondents. Start surveys on the newly constructed road in 2023, 3-years after opening.

RA3: Traffic Counts - Conduct after road opening in 2021 and again in 2023. Use a similar time of year (i.e., November, a neutral month) to avoid seasonality bias. 7 days as a minimum including a weekend. 14 days is better, to allow for any oneoff

events e.g. road accidents. Potential estimation errors due to calculation of annualization factors if short counts are used. Video cameras may support traffic counts to provide visual checking if available locally.

O-D Survey - The ET expects that the sample size should be equivalent to 20 percent of the total AADT traffic flow. The ET proposes to perform randomized sampling so that survey results are not biased.

RA4 - Semi-structured Interviews; Anticipated total sample size is 39-63 respondents. Start interviews between December 2020 and February 2021. Interviews will be conducted either with individuals or in small groups (two to three people) of respondents of the same type.

Transportation Company Surveys: Sample size to be confirmed depending on the number of transportation companies. Start interviews between December 2020 and February 2021. It is expected that most, if not all, surveys will be conducted in or around San Salvador.

RA5 and RA6 - Interviews of MCC, MOP, Custom and Border Agents, FOMILENIO II, Other stakeholders. At least one key informant per organization but likely up to four. Conduct interviews September - November 2020.

# Questionnaires

## Overview

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RA0 - Interviews; Sample unit or Respondent to include: MCC, MOP, FOMILENIO II, FOVIAL, other stakeholders. The interviews will allow the ET to understand from those involved some of the challenges with the implementation, reasons for design changes, and subsequent modeling of these changes. The ET staff in charge of conducting the interviews will be able to work in Spanish and English. The interviewers will use a pre-written interview guide or questionnaire.

RA2 - International Roughness Index (IRI) - IRI is used to define a characteristic of the longitudinal profile of a traveled wheel track and constitutes a standardized roughness measurement in meters per kilometer. IRI measurements will be collected using a laser profilometer. IRI surveys can be conducted at the earliest in 2023. All sections of the LIP will be sampled.

Visual Condition Survey. Visual condition surveys will be undertaken at the same time as the IRI surveys for the LIP. A visual road condition survey in accordance with the Distress Identification Manual for the Long-Term Pavement Performance (LTPP) (DOT, 2003) will be conducted on project roads to record their condition.

Semi-Structured Interviews; MCC and FOMILENIO staff, GoES officials (including the MOP), FOVIAL staff, Maintenance contractor staff, other donors, transport operators, and transport associations. Interviews will be conducted either with individuals or with small groups of two to three individuals. ET will target those respondents who are or were most closely involved in the road projects and in maintenance.

RA3 - Traffic Counts. Information required to understand the aggregate traffic flow by vehicle type, road section, and activity. This is expected to be done via automatic traffic counts or manual classified counts (the former preferred).

Origin-Destination Surveys; Information that explains the qualitative reasons for the journey, including what is being transported, the cost of transportation, and reasons for travel. These data will require a manual intercept survey approach. Repeat 2014 surveys once improvements are completed. The ET expect to use a similar survey design to allow a comparison between surveys to provide panel data sets.

RA4 - Semi-structured Interviews; Semi-structured interviews will be conducted with the following entities: Trucking companies, Passenger transportation companies, Traders of goods, Business groups, MOP and Ministry of Transportation, The Competition Commission, Economic regulators, other donors. Interviews will be conducted either with individuals or in small groups (two to three people) of respondents of the same type.

Transportation Company Surveys: A single transportation company survey questionnaire will be developed for each market identified. The ET will target company representatives who are familiar with the company's costs and pricing, as well as the transportation sector more broadly.

RA5 and RA6 - Interviews of MCC, MOP, Custom and Border Agents, FOMILENIO II, other stakeholders. The interviews will allow the ET to understand from those involved some of the challenges with the implementation, reasons for design changes, and subsequent modeling of these changes.

## Data Collection

### Data Collection Dates

Start	End	Cycle
2020-06-01	2023-06-29	N/A

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## Data Processing

No content available

## Data Appraisal

No content available